

Paper March 30th 1826

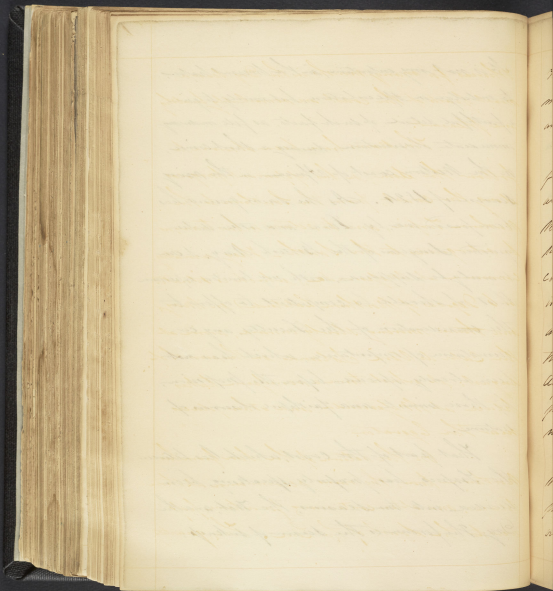
Medical
Observations,

Made during a short period on the
Western Coast of Africa,

By
George Turrell
of
Virginia

1
It is not my intention, in the present paper, to indulge in speculation, but merely to give a faithful detail, of such facts, as fell under my immediate observation, during a short cruise, on the Western coast of Africa, in the rainy season of 1824. As the same ground has been passed over, by Linnæ, and other distinguished Surgeons of the British Navy, it can scarcely be supposed, with my limited experience, that I should be competent to offer, to the consideration of the Faculty, any circumstances of importance, which has not been already spread before the profession, by those minute and faithful observers of nature.

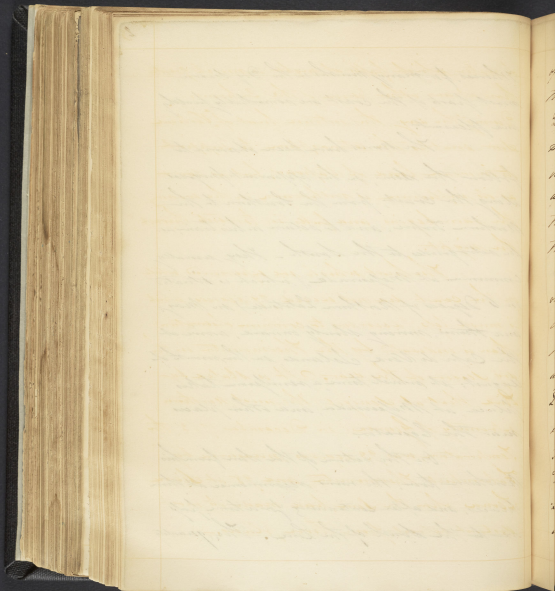
That part of the coast, which lies between the Tropics, has, properly speaking, been divided into two seasons, the Wet, and the Dry. The former is the season of sickness;



Whereas, for many months in the Dry season, most parts of the coast are remarkably healthy and pleasant.

The rains have been observed to follow the sun, in his apparent progress along the coast, from the Southern to the Northern Tropic, and to return in his train, as he retrogrades to the South - They usually commence at Meperanda, (which is situated in 6 Degrees of Northern Latitude) in May, and thence, moving slowly onward, arrive at the Cape de Verde Islands, in the month of August: at which time, a respiration takes place, at Meperanda, and other places near the Equator.

On the return of the sun from his Northern tour, the rains recommence at those places, and after continuing for a time, pass over to the South of the Line. They, quantity



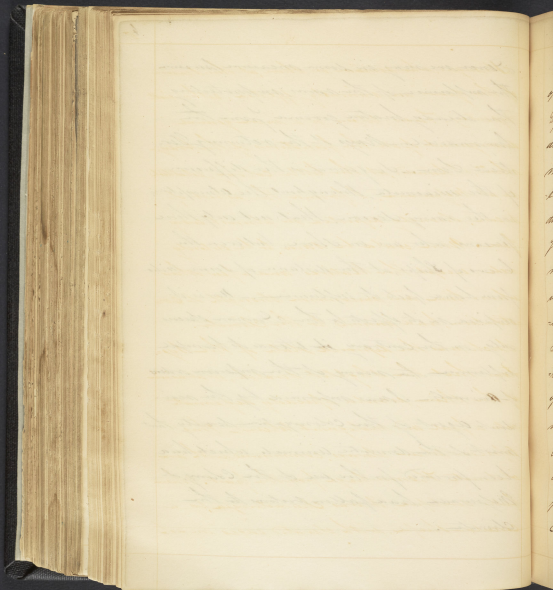
of water which falls at night, is much greater, than at any other period of the 24 hours.

During the day, the intense heat of Vertical Sun, enables the atmosphere, to support its immense load of Vapour, but as soon as its influence is withdrawn in the evening, the rain begins, and falls in torrents through the night.

The heat which we experienced while on the coast, did not exceed 79 degrees, which is much less, (according to common observation) than is indicated by the Thermometer, in the dry season of the year. It is stated by Dane, that at Senegal, (the most northern extremity of Guinea) in December 1763, the Temperature was 73 degrees, measured by Fahrenheit's Thermometer, and 98 at Sierra Leone, when the Sun, had made its most distant retreat from those places, —

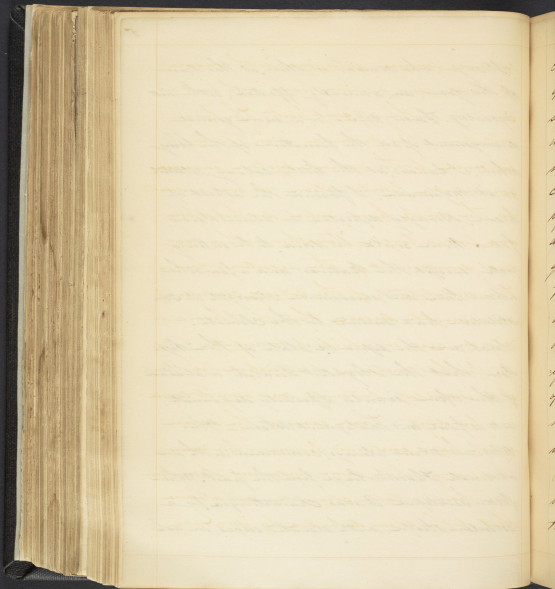
[Faint, illegible handwriting on lined paper, likely bleed-through from the reverse side.]

Never are we in doubt measure, however
the influence of the rains, in protecting
the already broken ground, from the
pernicious rays of the returning Ob-
scure Sun. - So general is the diffusion
of the miasmata, throughout the atmosphere
in the rainy season, that not only those
persons, who are on shore, but even the
Crews of Ships, at the distance of some miles
from land, feel its influence. - Nor is it
confined in its effects to the Human species
only; on the contrary, it extends its baneful
influence, to many of the inferior orders
of Animals. - I was informed by the sci-
entist Agent of the Colonization Society, that
most of the domestic Animals, which had
been procured for the use of the Colony, at
Nassau, had fallen victims to the
Climate.

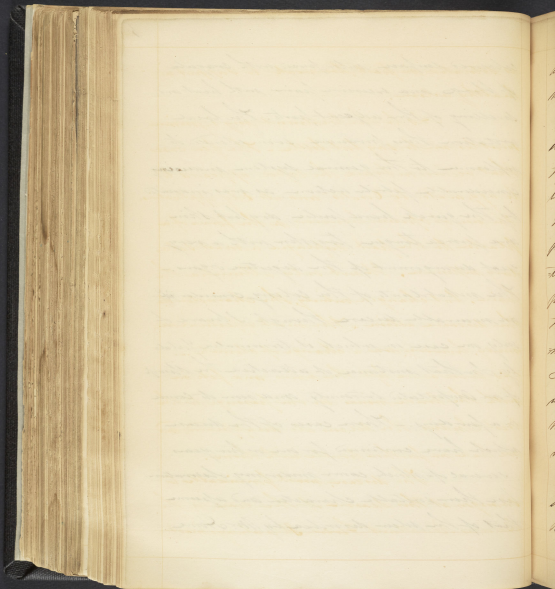


Strangers, who remain on shore, at this season of the year, are, variously affected, either with Dysentery, Flux, or a more general derangement of all the functions of the body. When, I landed, at the little colony, established at Neperuan, I found the aspect of disease, strongly depicted in almost every face. None could be said, to be entirely well, except the Natives, and a few others, whose time, and uncommon strength of Constitution, had insured to the Climate.

Such was the depraved state of the System, that the slightest scratch, or abrasion of the skin, would speedily degenerate, into a foul and malignant Ulcer - This African Ulcer, always, commenced with an obstinate Hemorrhage from the part. When fully developed, it was characterized, by a circular shape, with elevated edges, an ash



coloured surface, interspersed with cragula
of blood, and excessive pain, with heat and
swelling of the adjacent parts. The local
irritation, thus produced, soon extends its
influence to the general system, inducing
considerable febrile action, - as was indicated
by the quick hard pulse, dry hot skin,
and furrowed tongue, together with a very
great derangement of the digestive organs. -
The inhabitants of the colony consider it
an incurable disease, though I have of
only one case in which it terminated fatal-
ly. In that instance, it attacked the stump
of an amputated extremity, and soon its course
in a few days. - There cases of the disease,
which have continued for one or two years,
(several of which came under my observation),
lose their irritable character, and assume
that of the ulcer described by Mr. Stone,



7
is debilitated in parts, too weak, to support a
healthy action.

As to the treatment, very superior
matters are to say but little - The few cases
that occurred on board the *Apoc*, appeared to
be aggravated by Cures, and all dry applications.

The use of Opium, however, in the form of a
plaster to the part, displayed a most salu-
tary influence. It not only allimated the
pain, but changed entirely the character of
the disease action - The most effective re-
medy, however, was a change of climate -

As soon as we left the rains, and fell in
with the trade winds, on our passage to the
West Indies, the pains all disappeared, and
we have no further trouble with them.

The disease, most formidable to
stranger, at this season of the year, is the
Bilious Remittent Fever - It is always, most

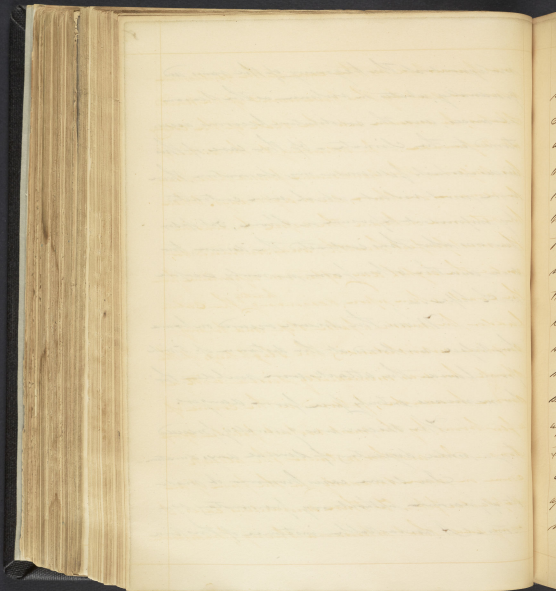


malignant at the beginning of the rains, and gradually, abates in violence, as the seasons advance, and the constitution becomes accustomed to the climate - Of the cases of this disease which fell under my observation, there were most violent, which were contracted by imprudent exposure on shore; but of six persons who thus contracted the disease, three died, and the other three narrowly escaped with life. -

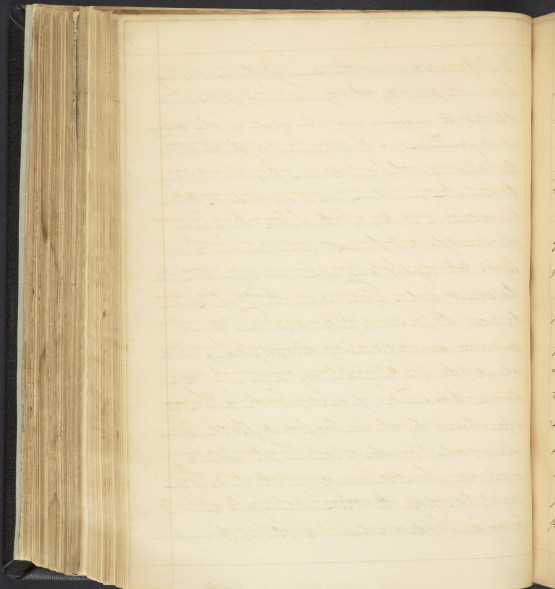
When the disease occurred on board the *Viper*, anchored at the distance of 5 miles from land, the attacks were milder, the by no means, entirely free from danger.

The disease was, generally, preceded by a mild dysentery of several days duration.

In some cases, however, it made its appearance, without any preceding symptoms. - A remarkable instance of this kind

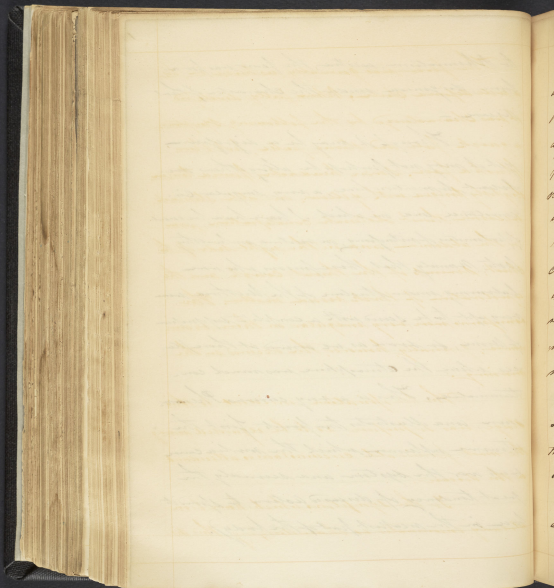


was furnished by the care of the gentleman
 who was sent by the Government of the United
 States, to enquire into the state of the colony
 at Meperuwa. - In attending to the duties of
 his mission, this gentleman found it necessary
 to remain on shore, six or eight days. When
 he returned on board the vessel, he was in
 the most perfect health, and continued so,
 until the eighth day, after our departure from
 the coast, when, upon descending ^{hastily} the cabin
 ladder, he made a false step, and to my
 surprise, notwithstanding the slightness of the
 shock, he was immediately seized with a
 severe headache, followed in the course of
 a few hours, by the most violent febrile symp-
 toms. - In another instance the attack
 came on more suddenly, in the form of an
 apoplectic fit. - To these numerous cases, I
 may add, that whenever a strong predisposition



the Rheumatism, exists, the fever, was for a
time, digressive under the character of that
disease. -

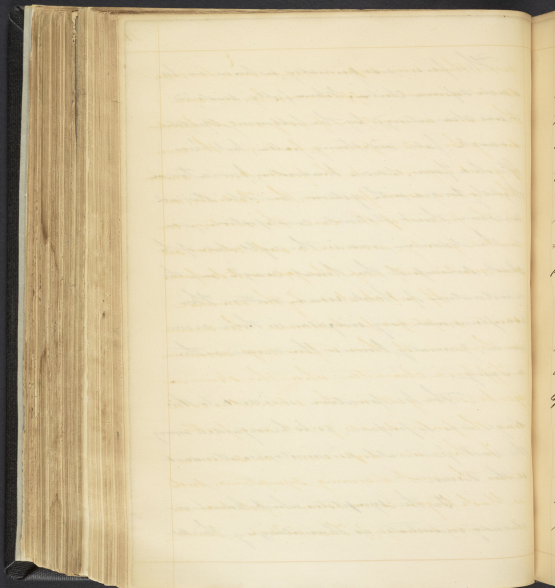
Though it may be a digression,
yet it may not perhaps be altogether irre-
levant, to mention here, a very singular Cir-
cumstance, and, on which, I have had frequent
opportunities of witnessing, on visiting convalescent
hospitals; Namely, that, those persons, who were
labouring under Stricture of the Urethra, were
very apt, to be cured with a complete suppression
of Urine; so soon as, we arrived at those pla-
ces, where the Atmosphere was much con-
taminated; This is a very curious Phenom-
enon, and illustrates two points; First the
extensive influence, which the morbid cause
exerts over the system, and secondly, the
great tendency of diseased action, to spend its
force, in the weakest part of the body).



The fever was generally ushered in, by a well defined chill, when fully developed, it was characterized by the following symptoms; a quick, full, and strong pulse, hot skin, flushed face, brown blackish, brown tongue, slightly tinged with yellow, inflamed stomach, occasional thirst, obstinate constipation, pain in the abdomen, and in the right side of the chest, soreness of the throat, cough, and the expectoration of thick viscid matter. The remissions were very irregular in their recurrence, generally, however, they occurred in the morning.

The perspiration, incident to this stage, was so profuse, as to be regarded among the most formidable circumstances attendant on the disease.

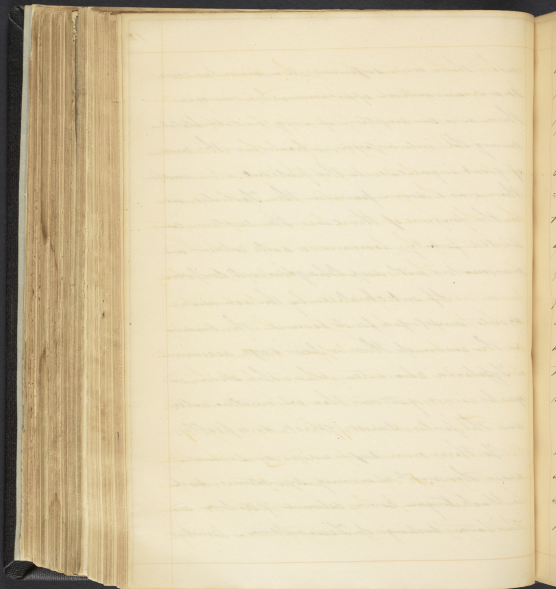
To the symptoms which have been already enumerated, as characterizing, this dis.



case, there were superadded, in one or two cases, several anomalous appearances. In one case there was an eruption of very irritable blotches, during the intermission, which was the cause of great inquietude to the patient. In another there was a severe pain in the Testicles, and in the progress of the case, the scrotoe, contracted firmly, assumed a dark colour, and was marked with deep Rhagades on its surface.

If not checked by the remedial agents employed for its removal, the disease in the course of three or four days, assumes a Typhoid character, when the skin, and eyes become yellow, the extremities cold, and the pulse small, quick and feeble.

To these were superadded, in several cases, the most alarming symptoms, such as, black tongue, coma, delirium, petechiae, and involuntary discharges of Feces and Urine. Usually



on the sixth or seventh day the disease came to a crisis, which was announced, in every instance by an expectation of florid frothy mucus.

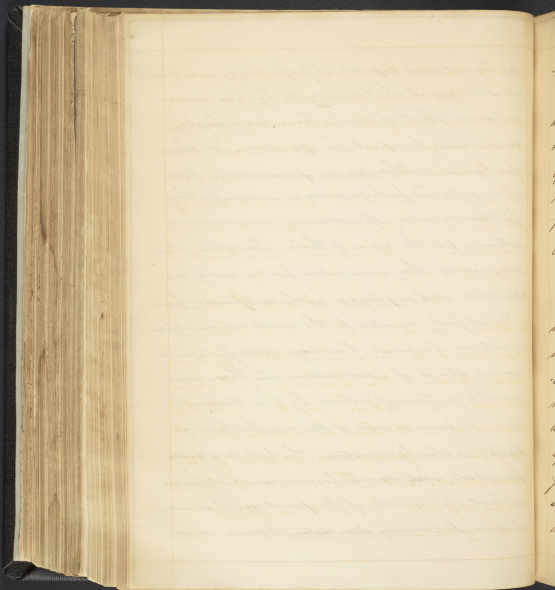
It would appear from these circumstances combined with several of the symptoms, mentioned, in the general character of the disease, that there must have been an inflammatory affection of the lungs, associated with the fever. This was owing perhaps, to a strong predisposition to pneumonia, which existed at the time, it having been the prevailing disease on board the vessel, while we visited the coast; and soon after we left the river, it returned, and became predominant.

The treatment of the early stage of this disease consisted principally in bloodletting, and purging. In some instances, blood was evacuated at once, to the amount of 20 or 30 ounces. This large bleeding generally effected, all that



The lancet was capable of performing, and indeed so strong was the tendency to Typhus, in most instances, that it would have been highly important, to repeat the operation. We therefore trusted to other modes of evacuation, for more safe, and perhaps more efficient for the further reduction of excitement, and nervous action. Let the heads of these, Purgatives, stand conspicuous, they were called for by many indications, and employed with no sparing hand.

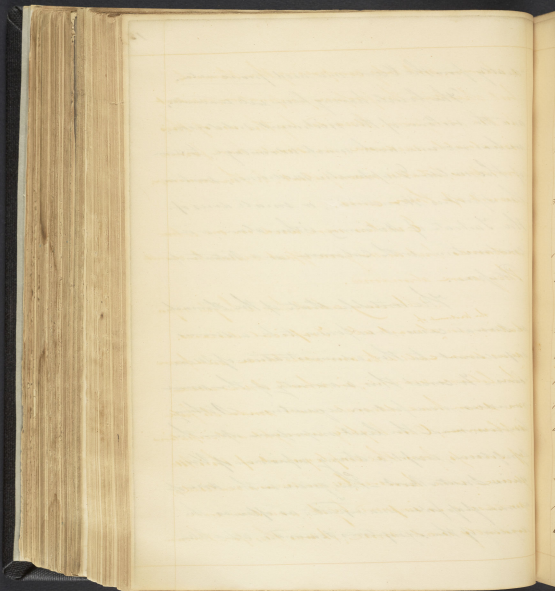
We at first, resorted to the most active articles, such as, Calomel, Jalap, and Jalap, in various states of Combination, and these were assisted in their operation, by the, Oleum Ricini, or divided doses of some of the Neutral Salts, as also by injections, the best materials for which, were always found ready at hand, without the trouble of preparation; I allude of course to Common Sea Water, distilled, &c. &c.



"diately from the Oeum, una, med. pro, re nota.

The bowels having been well evacuated, and the violence of the excitement subdued, we had recourse, with much advantage, to some of the milder Diaphoretic Medicines, such as the Spiritus Mindereri, or small doses of the Tartrate of Antimony, either alone, or in combination, with Calomel, and a Nitrate of Potassa.

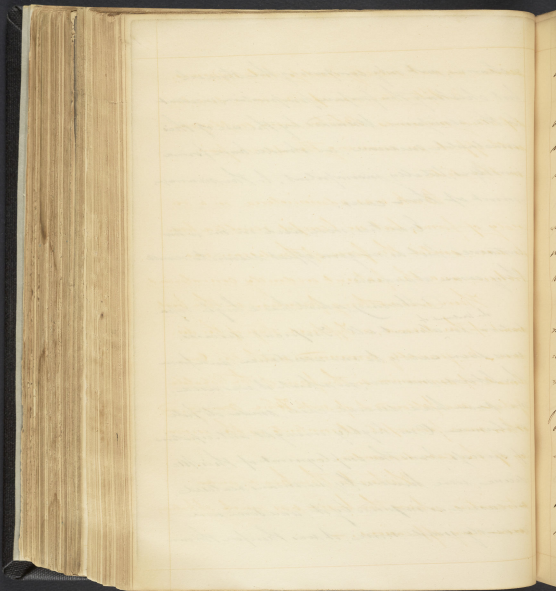
The irritable state of the stomach in several cases, was found to be a serious impediment to the administration of Medicines. To correct this, a variety of the power remedies, were put in requisition. Nothing, however, made the least impression upon the symptom, except a strong infusion of Virginia Snaker Root - This given in the dose of a wine glass full, and repeated, as often as the urgency of the symptoms demanded, acted, later



18
a charm, not only comprising the Stomach,
but checking the profuse perspiration, incident
to the eruptions. Strained by the use of these
invaluable medicines, we should have found
ourselves, totally incompetent, to the manage-
ment of these cases.

Emetics, were used in one or two
instances, but as no good effect seemed to result,
they were abandoned.

Mercury, which has a high repu-
^{the treatment of}
tation, in almost all, Tropical diseases,
was soon called to our assistance; and from
the liberal manner, in which it was used,
we soon had several cases, border its fatal
influence. Our highly wrought anticipations
of success, from the employment of this Me-
dicine, were however by no means realised,
no case was improved by it, and some were
evidently made worse; it was therefore thrown



17
aside, as not merely useless, but, injurious.

After the use of the more directly
depleting measures, Blesters were employed
with effect, in removing the severe pain
in the side.

Bark was administered, in a va-
riety of forms, but no benefit resulted from
its use, until the force of the disease was
broken, and the patient evidently convalescent.

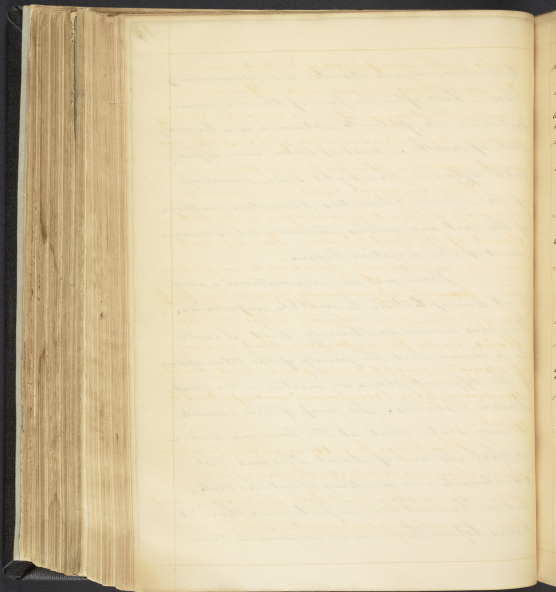
There was nothing peculiar in the treat-
ment of the second, or Typhoid stage of the dis-
ease. We generally commenced with the Eu-
romatic of Annemann, in the form of the Oblative
Julep, and followed it up, with Wine, Brandy, and
other more powerful stimulants, as the urgen-
cy of the case demanded. —

Blesters to the head, and
extremities, where the brain was much affected,
were very efficacious. —

[Faint, illegible handwriting in a cursive script, likely a historical document or manuscript.]

Comalescence was observed to be uncommonly slow - Long after the force of the disease was subdued, the patients continued, in a lingering state of health. Most of them were affected with a pain in the right side, numbness of the inferior extremities, & venous swellings of the feet and ankles; and more or less derangement of the Digestive Organs.

There was in every instance, a very great susceptibility to malarial impressions. This was evinced so strongly, that I could by its means, test the purity of the atmosphere of the different places we visited in the West India Islands; In proof of this remark, I may state, that, at the time we arrived at this Island of Saint Thomas, the Comalecents were pralling about the Neck, but we had not been in port more than 24 hours before they were all confined to their



births, with symptoms of violent fever.—
The same thing occurred in the Hurons, and
again in Matanzas. It was remarked in every
instance, that the condition of the Sicks, was
much improved after putting to Sea.—

These lingering cases were found ex-
ceedingly difficult to manage, in the hot
climate of the West Indies. Purging, Anti-
septica, and Mercury, proved quite ineffectual,
and a favorable opportunity presenting itself,
the afflicted, were returned to the United
States, under the impression, that a change
of climate, might accomplish, that, which
Medicine, had been found incompetent to
effect.

This brings to a conclusion, the prin-
cipal observations, which I have been
able to make, on those diseases, which
came under my immediate notice, on

[Faint, illegible handwriting, likely bleed-through from the reverse side of the page.]

20
The Western coast of Africa.

Imperfect as they are, I submit
them to the enlightened wisdom of the
Faculty. 